CHAPTER 4:

Evaluating Stormwater Releases

The **Clean Water Act** also regulates STORM WATER runoff that has been in contact with industrial storage materials, wastes, loading docks, and other potential sources of chemical contamination. These regulations prevent chemicals and wastes from contaminating surface and groundwater. However, when companies keep these areas under cover, protected from storm water (rain and snow), they do not come under regulation. Regulation and management of storm water discharge falls under National Pollutant Discharge Elimination System (NPDES) requirements of the Clean Water Act. Either a facility does or does not have discharge of contaminated storm waters to surface water.

Introduction

Proper Management of Stormwater prevents potentially harmful chemicals from contaminating surface or ground water. All industrial facilities that potentially discharge storm water containing pollutants to a water of the United States must apply for coverage under a National Pollutant Discharge Elimination System (NPDES) permit**. However, a permit is not required at facilities that can certify a "no exposure" condition is maintained. No exposure exists at an industrial facility when it precludes exposure of industrial activities to storm water.**

In other words, all industrial materials or activities, including, but not limited to, material handling equipment, industrial machinery, raw materials, intermediate products, by-products or waste products are protected by a storm-resistant shelter so as not to be exposed to rain, snow, snowmelt, or runoff. Adequately maintained mobile equipment (e.g., trucks, automobiles, trailers, found at the industrial site, that are not leaking contaminants or are not otherwise a source of industrial pollutants) may be exposed to precipitation or runoff without requiring a permit.

Do not Store any Chemicals Outside the Building

The easiest way to prevent the facility from requiring a stormwater permit is to not store any chemicals or other raw materials outside. The only item that can be stored outside (without requiring a permit) are wooden pallets.

Cover Your Loading Dock

One trouble spot for printers is the potential for exposure of chemicals to stormwater during transfer into the building from delivery trucks. If your loading dock is covered, any chemicals or other materials brought into the facility via the loading dock will not be exposed to stormwater thus preventing you from requiring a stormwater permit.

Stormwater Discharges to POTW

If contaminated storm water is discharged to (or is planned to be discharged to) the POTW, the POTW must be notified and permission to discharge obtained. As part of the PrintSTEP process, the state will coordinate this notification. A NPDES permit is not necessary if all storm water is discharged to the POTW.

Determining "No-Exposure"

Use the following checklist to determine if a "no exposure" condition exists at your facility. Circle "Yes" or "No" as appropriate to describe conditions at your facility. If you answer "Yes" to any of the questions, a potential for exposure exists at your site and you cannot immediately certify a no-exposure condition exists. You must contact the NHDES to determine your requirements, and if necessary, obtain coverage under a NPDES Storm Water permit if you have not already done so.

Storm Water Exposure Checklist

Are any of the following items exposed to precipitation, now or in the foreseeable future? Is the drainage from these areas discharged from the site to any surface waters or a storm sewer system?

a. vehicles used in material handling (excepting adequately maintained mobile equipment).	Y or N
b. industrial machinery or equipment	Y or N
c. residue from the cleaning of machinery or equipment	Y or N
d. materials associated with vehicular maintenance, cleaning, or refueling	Y or N
e. materials or products during loading/unloading or transporting activities	Y or N
f. materials or products at uncovered loading docks	Y or N
g. materials or products stored outdoors (except for products intended for outdoor use, e.g., cars)	Y or N
h. materials or products handled/stored on roads or railways owned or maintained by the certifier	Y or N
i. materials or spill/leak residues accumulated in storm water drain inlets	Y or N
j. residuals on the ground from spills/leaks (including subsurface residuals from percolation)	Y or N
k. materials contained in open or deteriorated storage tanks/drums/containers	Y or N
l. industrial activities conducted outdoors	Y or N
m. materials or products from past outdoor industrial activity	Y or N
n. waste material, (i.e. drums or containers…)	Y or N
o. process waste water disposed of outdoors (unless otherwise permitted)	Y or N
p. particulate matter from roof stack/vents not otherwise regulated (i.e., under air quality control permit) and in quantities detectable in the storm water outflow	Y or N
q. visible deposits of residuals near roof or side vents	Y or N
r. spills/leaks resulting from maintenance of stacks or air exhaust systems	Y or N

Determining your Stormwater Status

After completing the Stormwater Exposure Checklist, complete the following:

Check one:	Your STORM WATER is:
☐	A "no exposure" condition exists. **STOP: Go to Chapter 5**
☐	Regulated by a NPDES general permit for storm water discharge. Continue with this Chapter

Requirements for Printers Regulated by a NPDES general permit for stormwater

Unless you have a "no-exposure" condition, the following requirements apply under the NPDES general permit for stormwater:

Materials Management

- ✓ Have site specific Best Management Practices (BMPs) based on facility size, climate, geographic location, geology/hydrology and the environmental setting of each facility, and volume and type of discharge generated.

Administrative

- ✓ Submit a notice of intent (NOI) to be covered by this general permit.

Monitoring

- ✓ Conduct a comprehensive site compliance evaluation once a year by qualified personnel. The inspection is to:
  - Confirm the accuracy of the description of potential discharge sources identified in the Pollutiion Prevention Plan. (The Plan describes your company's source reduction program),
  - Determine the effectiveness of the P2 plan,
  - Assess compliance with the terms and conditions of the permit. Based on results of each evaluation, description of potential pollution sources and measures of control must be revised as appropriate within 2 weeks after each evaluation. Changes in the measures and controls must be implemented on the site in a timely manner, never more than 12 weeks after completion of the evaluation.

- ✓ Conduct quarterly (January - March, April – June, July – September, October - December) visual examinations of a storm water discharge from each point of discharge. The inspection must be of a grab sample collected from each point of discharge. Samples must be collected within the first hour and preferably within the first 30 minutes of when the runoff begins discharging. The examination of the sample shall include any observations of color, odor,

turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. The examination must be conducted in a well lit area.

Record Keeping

- ✓ Retain the comprehensive site compliance evaluation reports for at least 3 years after the date of the evaluation.

- ✓ Retain records on the status and effectiveness of the P2 plan implementation including the success and failure of BMPs at the facility.

- ✓ Maintain quarterly visual examination reports which must include:
    - the examination date and time
    - examination personnel
    - visual quality of the storm water discharge
    - probable sources of any observed storm water contamination

- ✓ Maintain records on site with the P2 plan. If a visual examination can not be made due to adverse climatic conditions, this must be documented and the report maintained with the P2 plan.

Pollution Prevention Plan

- ✓ Maintain a pollution plan on site with a description of potential pollutant sources including:
    - site map
    - inventory of exposed materials
    - significant spills and leaks
    - non-storm water discharges
    - sampling data
    - summary of potential pollutant sources

- ✓ Select, describe and evaluate the P2 measures, BMPs, and other controls that will be implemented at the facility. Source reduction includes preventive maintenance, spill prevention, good housekeeping, training, and material management. If source reduction is not an option include BMPs such as material coverings, water diversion and dust control. If neither is available, then recycling or waste treatment are other alternatives. P2 plans must discuss reasons for selecting control or practice and how each will be addressed at the facility. Measures and controls must address the following:
    - good housekeeping
    - preventive maintenance
    - spill prevention and response procedures
    - inspections
    - employee training
    - record keeping and internal reporting procedures
    - sediment and erosion control
    - management of run off

Modifications

- ✓ If your storm water status changes, see Chapter 2 of this *guide* for guidance on updating your PrintSTEP Agreement.